Management

Control of competition is necessary for successful stand establishment. High mowing (above the bluestem seedlings) is a common method of weed control. Once established, poor stands can be rehabilitated by using proper management practices, such as controlled grazing, application of recommended rates of herbicides and fertilizer, and prescribed spring burning, where permitted.

Do not graze a forage planting during the year of establishment. During subsequent growing seasons, harvesting by controlled grazing or haying is possible on good stands. Do not remove more than 50% of the current year's growth from plants. No cropping should occur below 8 inches or within 1 month of anticipated frosts. Grazing of competing cool season grasses after frost in the fall and before the little bluestem is 1 inch tall in the spring is desirable.

In rotational grazing systems, remove no more than ½ the above ground growth (no shorter than 8 to 12 inches). With care, the stand will last indefinitely. Forage quality will remain high until the seed head emerges. Grazing should begin from mid to late June when grasses reach 12 to 16 inches in height. Overgrazing can damage the stand and should be stopped when the plants are grazed to within 6 inches of the ground. If re-growth of more than 12 inches takes place, the plants can be re-grazed to 6 to 12 inches. Leaving this much stubble before frost allows the plants to store carbohydrates and ensures the production of vigorous plant growth in the spring.

Pests and Potential Problems

There are no serious pests of little bluestem.

Opportunities to Participate

NRCS Field Offices, District Employees, Partners and Volunteers: We need your help!

The Cape May PMC serves a nine-state area extending from Massachusetts to North Carolina. The plant developmental process used by the Cape May PMC relies heavily on the cooperation of our conservation partners to locate native plant stands; collect materials and ship them to Cape May; locate suitable plant testing sites; record plant performance data; and publish new scientific findings. Call the Cape May PMC for more details about how you can help.

Tours Available

Visitors are always welcome at the PMC. The center is open Monday through Friday. Please call the PMC to schedule your visit.

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Cape May Plant Materials Center (PMC)



Suther Germplasm Little Bluestem Source Identified Germplasm

Schizachyrium scoparium (Michx.) Nash

A North Carolina Ecotype

Cape May PMC products are helping people help the land through better plants and science

Little Bluestem



Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions. Vol. 1: 115. Courtesy of Kentucky Native Plant Society. Scanned by Omnitek Inc. Usage Requirements.

Scientific Name:

Schizachyrium scoparium

Common Name:

Little bluestem

Description:

Little bluestem is a medium height grass with coarse stems and basal leaves. Little bluestem has very flat bluish basal shoots. Plants are green, but often purplish at base of stem and the entire plant has a reddish cast after frost. Leaves are smooth, but frequently are covered with hair at the base next to the sheath. Leaves tend to fold with maturity. Seed head clusters about three inches long. The cluster stems are hairy. Plant height varies from 18 inches on droughty sites to 3 feet on deep, fertile soils. There are 255,000 seeds per pound.

Broom-sedge (*Andropogon virginicus*) has a straight awn and has two or more stalked seed clusters per branch. Little bluestem has a twisted, bent awn and a single cluster of seeds per branch. Seacoast bluestem (*Schizachyrium scoparium* var. *littorale*) occurs only in the coastal plain region. It is very similar to little bluestem but can be distinguished by the bent stems at the base, whereas little bluestem stems are erect.

Establishment

Little bluestem should be seeded as early in the spring as possible. Where no-till is used due to slope, stoniness, or other reasons, sod control should be performed in the fall to permit early spring planting. The seeding rate for establishing a pure stand with broadcast or no-till methods should be 7 to 12 pounds PLS per acre. When drills are used to plant, debearded seed must be utilized unless the drill has a chaffy seed box. When the seed is broadcast, a packer should be utilized to firm the seedbed and incorporate the seed 1/4 to 1/2 inch (3/4 inch on very droughty sites). No nitrogen fertilizer should be applied during the establishment year unless no weed competition is expected. If pH is below 5.5, lime is recommended during site preparation or the fall prior to no-till plantings.

For critical area seeding, the preferred method of planting is drilling, but if this is not possible, an acceptable alternative method is broadcasting the seed (typically in a mix with other warm season grasses) and 'tracking' it in with a bulldozer. The dozer moves up and down slope, off-setting each pass until the entire area is covered with tracks. Seedings should be made as early as possible in the spring on sands and gravels, without mulching. Moderate levels of N, P, and K are sufficient for establishment, and soil pH should be 5.5 to 6.0. Culti-packer-type planters are not suitable for this species.

Photo of PMC Production Field



Seed increase plot at the Cape May PMC.

Origin

Suther Germplasm Little Bluestem originated from Cabarrus County North Carolina. Because the land never experienced the American plow, the plant community was considered a truly remnant eastern U.S. prairie system.

Adaptation

Area of adaptation has not been determined. However, this geno-type has exhibited typical morphological characteristics as far north as Cape May NJ.

Application and Uses

- USDA Conservation Programs
- Providing food and cover for Wildlife
- Increasing species diversity
- Controlling erosion
- Restoring grassland communities